

	L		R	
T	1	-1	2	-2
B	3	-3	4	-4

A *dominant strategy* is a strategy that is optimal, no matter what strategy our competitor selects.

	L		R	
T	4	-4	1	-1
B	3	-3	2	-2

“O wad some Pow'r the giftie gie us  
To see oursels as others see us!  
It wad frae monie a blunder free us  
And foolish notion:”

Robert Burns, *To a Louse*

“The final lesson of the Cuban missile  
crisis is the importance of placing  
ourselves in the other country's shoes...”

Robert F. Kennedy, *Thirteen Days:  
A Memoir of The Cuban Missile Crisis*

## The Prisoners' Dilemma

	confess		don't	
confess	-6	-6	0	-10
don't	-10	0	-2	-2

## ... and Omerta

	confess		don't	
confess	-6	-6	-1000	-10
don't	-10	-1000	-2	-2

From the *Oxford English Dictionary*:

**omertà.** dial. form of Ital. umiltà humility, with reference to the Mafia code which enjoins submission of the group to the leader as well as silence on all Mafia concerns. Refusal to give evidence by those concerned in the activities of the Mafia.

A *best response* to a competitor's choice of strategy is a strategy that maximizes our own expected payoff.

An *equilibrium point* of a “game” is a pairing of strategies such that each is a best response to the other.

**Incredibly important normative observation:**

**If two “players” are facing one another, and neither makes a mistake (that is, each correctly anticipates the other’s strategic choice, and responds optimally), then they will end up selecting strategies that together constitute an equilibrium point.**

Still, ... pre-play signaling and positioning can affect the game itself;  
we can try to lead others into making a mistake;  
sometimes there are multiple equilibria

**Incredibly important prescriptive observation:**

**Generally, there’s much more to “playing a game” than just identifying an equilibrium point and playing your side of it.**

The generic “Battle of the Sexes”

	mountains		beach	
mountains	$t_R+d_R$	$t_C$	$d_R$	$d_C$
beach	0	0	$t_R$	$t_C+d_C$

Ships passing in the night:  $t_R=t_C=1$ ,  $d_R=d_C=2$

	mountains		beach	
mountains	3	1	2	2
beach	0	0	1	3

I will follow you ... :  $t_R=1$ ,  $t_C=2$ ,  $d_R=2$ ,  $d_C=1$

	mountains		beach	
mountains	3	2	2	1
beach	0	0	1	3

The real “Battle of the Sexes”:  $t_R=t_C=2$ ,  $d_R=d_C=1$

	mountains		beach	
mountains	3	2	1	1
beach	0	0	2	3

Fatal Attraction:  $t_R=-2$ ,  $t_C=2$ ,  $d_R=1$ ,  $d_C=0$

	mountains		beach	
mountains	-1	2	1	0
beach	0	0	-1	2